Amendments to the Claims

In The Claims

Please amend Claims 32-38 and 46 as follows:

1-20. (cancelled)

21-30. (withdrawn)

31. (cancelled)

32. (currently amended) An optical arrangement in a confocal microscope, the arrangement comprising:

means for spectrally fanning out ~~to spectrally fan out~~ an incoming light beam in a detection beam path of said confocal microscope;

means for splitting ~~to split~~ said spectrally fanned out light beam out of a dispersion plane for said spectrally fanned out light beam;

means for detecting a spectral range of said split, spectrally fanned out light beam; and,

a pinhole occluder, located at a focus for said detection beam path, having a passageway with a polygonal configuration.

33. (currently amended) The optical arrangement as recited in Claim 32 wherein said means for spectrally fanning out an incoming light beam ~~spectral fanning means~~ further comprises a prism.

34. (currently amended) The optical arrangement as recited in Claim 32 wherein said means for splitting said spectrally fanned out light beam ~~splitting means~~ further comprises a plurality of locations at which said spectrally fanned out light beam strikes said splitting means; and,

wherein said means for splitting said spectrally fanned out light beam ~~splitting means~~ reflects all of said spectrally fanned out light beam at a first location selected from said plurality of locations and passes all of said spectrally fanned out light beam at a second location selected from said plurality of locations.

35. (currently amended) The optical arrangement as recited in Claim 34 wherein said means for splitting said spectrally fanned out light beam ~~splitting means~~ further comprises a first detection gap element having a first gap; and,
wherein said first gap is operatively arranged to pass a first range of said spectrally fanned out light.

36. (currently amended) The optical arrangement as recited in Claim 35 wherein said means for detecting a spectral range of said split, spectrally fanned out light beam ~~detecting means~~ further comprises a first detector operatively arranged to detect at least a portion of said first range passing through said first gap.

37. (currently amended) The optical arrangement as recited in Claim 35 wherein said first detection gap element further comprises a reflective surface operatively arranged to reflect a second range of said spectrally fanned out light beam; and,
wherein said means for splitting said spectrally fanned out light beam ~~splitting means~~ further comprises a second detection gap element having a second gap operatively arranged to pass said reflected second range.

38. (currently amended) The optical arrangement as recited in Claim 37 wherein said means for detecting a spectral range of said split, spectrally fanned out light beam ~~detecting means~~ further comprises a second detector operatively arranged to detect at least a portion of said second range passing through said second gap.

39. (previously presented) The optical arrangement as recited in Claim 32 wherein said passageway is symmetrically configured.

40. (previously presented) The optical arrangement as recited in Claim 39 wherein said passageway has a triangular configuration.

41. (previously presented) The optical arrangement as recited in Claim 39 wherein said passageway has a four-corner configuration.

42. (previously presented) The optical arrangement as recited in Claim 39 wherein said passageway has a rectangular configuration.

43. (previously presented) The optical arrangement as recited in Claim 32 wherein said passageway has a triangular configuration.

44. (previously presented) The optical arrangement as recited in Claim 32 wherein said passageway has a four-corner configuration.

45. (previously presented) The optical arrangement as recited in Claim 32 wherein said passageway has a rectangular configuration.

46. (currently amended) An optical arrangement in a confocal microscope, the arrangement comprising:

means for spectrally fanning out ~~to spectrally fan out~~ an incoming light beam in a detection beam path of said confocal microscope;

means for splitting ~~to split~~ said spectrally fanned out light beam out of a dispersion plane for said spectrally fanned out light beam;

at least one detector operatively arranged to detect a range of said spectrally fanned out beam on a detection line in said dispersion plane, said detection line defined by diffraction minima of said fanned out beam on said dispersion plane; and,

a pinhole occluder, located at a focus for said detection beam path, having a passageway with a polygonal configuration.